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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,202	01/16/2001	James E. Mathews	03797.00090	6561

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EXAMINER

NGUYEN, JENNIFER T

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 05/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/759,202

Applicant(s)

MATHEWS ET AL.

Examiner

Jennifer T Nguyen

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

1. This office action is responsive to amendment filed on 02/05/2003.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-7, 11, 12, 16-26, 30, 31 and 35-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Doval et al. (U.S. Patent No. 6,476,834).

Regarding claims 1, 20 and 39, referring to Figs. 1 and 2, Doval teaches a method for detecting an in air gesture comprising step of: determining whether a digitizing pen (272) is not in contact with a digitizing writing surface (190, 130); determining whether the digitizing pen (272) is in motion with respect to the digitizing writing surface (190, 130); recording positional information of the digitizing pen (272) with respect to the surface of the digitizing writing surface (190, 130) within a moving buffer (300) (i.e. handwriting recognition) when the digitizing pen (272) is determined to not be in contact with the digitizing writing surface (190, 130) and when the digitizing pen (272) is determined to be in motion with respect to the digitizing writing surface (190, 130), the moving buffer (300) recording a predetermined amount of positional information spanning a predetermined amount of time while the digitizing pen (272) is in motion and not in contact with the digitizing writing surface (190, 130); determining

Art Unit: 2674

when the digitizing pen (272) has stopped motion with respect to the surface of the digitizing writing surface (190, 130) while the digitizing pen (272) is not in contact with the digitizing writing surface (190, 130); and determining whether positional information recorded in the moving buffer (300) corresponds to a predetermined in-air gesture that can be made with the digitizing pen (22) (abstract, col. 2, lines 29-51, col. 3, lines 5-34 and col. 4, lines 4-67).

Regarding claims 2, 21 and 40, Doval teaches displaying a predetermined user interface panel (130) when the positional information recorded in the moving buffer (300) corresponds to a predetermined in-air gesture that can be made with the digitizing pen (272) (col. 4, lines 4-40).

Regarding claims 3-7 and 22-26, referring to Fig. 2, Doval teaches the in-air gesture is a down spike motion, up spike motion, right spike motion, left spike motion (col. 4, lines 4-42).

Regarding claims 11, 12, 30 and 31, Doval teaches positional information recorded in the moving buffer corresponds to a predetermined in-air gesture is based on a detected motion shape and motion size (col. 6, lines 9-53).

Regarding claims 16 and 35, Doval teaches the digitizing pen (272) is not in contact with the digitizing writing surface (190, 130) includes a step of receiving an input indicating that the digitizing pen (272) is in a hovering state (abstract and col. 4, lines 4-42).

Regarding claims 17, 18, 36 and 37, Doval teaches sending a predetermined sequence of characters to an application program when the positional information recorded in the moving buffer (300) corresponds to a predetermined in-air gesture that can be made with the digitizing pen (272) (col. 4, lines 4-67).

Regarding claims 19 and 38, Doval teaches sending a predetermined command to an application program when the positional information recorded in the moving buffer (300)

Art Unit: 2674

corresponds to a predetermined in-air gesture that can be made with the digitizing pen (272) (col. 4, lines 4-67).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doval et al. (U.S. Patent No. 6,476,834) in view of Yoshida et al. (5,502,803).

Regarding claims 14 and 33, Doval differs from claims 14 and 33 in that he does not specifically teach the digitizing pen and digitizing writing surface are electromagnetic devices. However, Yoshida teaches digitizing pen and digitizing writing surface are electromagnetic devices (col. 8, lines 19-28). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the digitizing pen and digitizing writing surface are electromagnetic devices as taught by Yoshida in the system of Doval in order to provide better display system.

6. Claims 15 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doval et al. (U.S. Patent No. 6,476,834) in view of Black (U.S. Patent No. 6,307,956).

Regarding claims 15 and 34, Doval differs from claims 15 and 34 in that he not specifically teach the digitizing pen and digitizing writing surface are optical devices. However, referring to Figs. 1B and 2A, Black discloses digitizing pen and digitizing writing surface are

Art Unit: 2674

optical devices (col. 19, lines 3-11). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the digitizing pen and digitizing writing surface are optical devices as taught by Black in the system of Doval in order to provide a fine line pattern or image on the resist surface.

7. Claims 8, 9, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doval et al. (U.S. Patent No. 6,476,834) in view of Altman et al. (U.S. Patent No. 6,535,897).

Regarding claims 8, 9, 27 and 28 Doval differs from claims 8, 9, 27 and 28 in that he does not specifically teach a predetermined amount of positional information is about 200 points of coordinate information and a predetermined amount of time that positional information is recorded in the moving buffer is about 1 second. However, Altman teaches a predetermined amount of positional information is about 200 points of coordinate information and a predetermined amount of time that positional information is recorded in the moving buffer is about 1 second (col. 35, line 65 to col. 36, line 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the predetermined amount of positional information is about 200 points of coordinate information and the predetermined amount of time that positional information is recorded in the moving buffer is about 1 second as taught by Altman in the system of Doval in order to reduce advantageously the number of points that are used define a pen movement.

8. Claims 10, 13, 29 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doval et al. (U.S. Patent No. 6,476,834)

Regarding claims 10 and 29, Doval differs from claims 10 and 29 in that he does not specifically teach a starting point and an ending point, and wherein the step of determining

Art Unit: 2674

whether positional information recorded in the moving buffer corresponds to the predetermined in-air gesture is based on a relative position of the starting point with respect to the ending point. However, it would have been obvious to obtain a starting point and an ending point, and wherein the step of determining whether positional information recorded in the moving buffer corresponds to the predetermined in-air gesture is based on a relative position of the starting point with respect to the ending point in order to allow the action taken more efficient.

Regarding claims 13 and 32, Doval differs from claims 12 and 32 in that he does not specifically teach positional information recorded in the moving buffer corresponds to a predetermined in-air gesture is based on a detected motion speed. However, it would have been obvious to obtain positional information recorded in the moving buffer corresponds to a predetermined in-air gesture is based on a detected motion speed in order to provide easy and quick access to the system functionality.

9. Applicant's arguments with respect to claims 1-38 have been considered but are moot in view of the new ground(s) of rejection.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shinozuka et al. (U.S. Patent No. 6,240,207) teaches handwriting input display apparatus.

Moran et al. (U.S. Patent No. 6,525,749) teaches diagrams in a gesture based input system.

Agulnick et al. (U.S. Patent No. 5,347,295) teaches control of a computer through a position-sensed stylus.

Art Unit: 2674

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jennifer T. Nguyen** whose telephone number is **703-305-3225**.

The examiner can normally be reached on Mon-Fri from 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reach at **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks


Washington, DC. 20231

Or faxed to: 703-872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, sixth-floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703-306-0377.

Jennifer T. Nguyen
Patent Examiner
Art Unit 2674



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600